DETERMINING WIDTH OF AREA (8600)

(1987)

DETERMINING WIDTH OF AREA

Assume a fire is ten miles away and directly visible to the Lookout.

Right Reading: 187 degrees 12 minutes

Left Reading: 186 degrees 40 minutes

Angular Difference
Difference = in Readings = 0 degrees 32 minutes

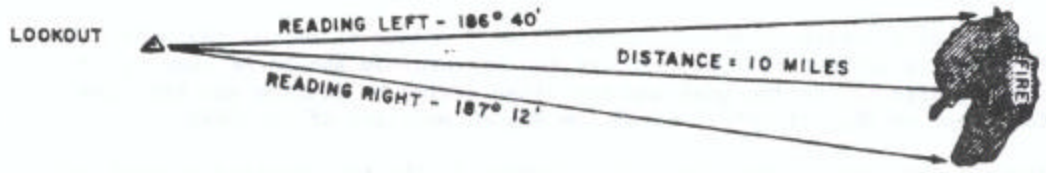
THEREFORE:

Width in feet = 1.5 x 32 x 10 miles = 480 feet

OR USE RULE OF THUMB: 1 degree at 1 mile = 92 feet in width.
So 1 degree at 10 miles = 92 x 10 = 920 feet.
So 1/2 degree at 10 miles = 46 x 10 = 460 feet.

From such readings the ECC Officer can get an idea of the size of the fire, especially if he can get readings from two lookouts nearly at right angles 90 degrees to each other.

It will be seen that the vernier must be used and used correctly to solve problems of this type, for small errors in measurement of minutes of angle cause relatively large errors in measurement of width.



(See Table of Contents)